Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) An exposure apparatus which illuminates a pattern of a first object with ultraviolet light from a laser device and exposes a second object with the ultraviolet light which has passed through the pattern of the first object, wherein

the laser device includes:

a laser light generation section which generates single wavelength laser light in a wavelength range of from an infrared region to a visible region;

an optical modulating section which modulates the laser light generated by the laser light generation section;

an optical amplification section including an optical fiber amplifier which amplifies the laser light generated by the optical modulating section; and

a wavelength conversion section which performs wavelength conversion of the laser light amplified by the optical amplification section into ultraviolet light by using a nonlinear optical crystal, and

the optical modulating section performs pulse modulation of the laser light from the laser light generation section, and feeds the modulated laser light to the optical amplification section in a period in which the ultraviolet light is output, and the optical modulating section feeds light of an amplifiable wavelength zone to the optical amplification section in a range substantially not influencing an output of the ultraviolet light even in a period in which the ultraviolet light is not output.

2. (Previously Presented) An exposure apparatus as recited in claim 1, wherein

the optical modulating section performs pulse modulation of the laser light from the laser light generation section and feeds the modulated laser light to the optical amplification

section in a period in which the ultraviolet light is output, and the optical modulating section reduces the peak level of the output from the laser light generation section and feeds the resultant laser light to the optical amplification section in a period in which the ultraviolet light is not output.

3. (Previously Presented) An exposure apparatus as recited in claim 2, wherein

the peak level of the laser light to be fed from the optical modulating section to the optical amplification section in the period in which the ultraviolet light is not output is equal to or smaller than 1/10 of the peak level of the laser light fed from the optical modulating section to the optical amplification section in the period in which the ultraviolet light is output, and

an average level of the light output from the optical amplification section in the period in which the ultraviolet light is output is substantially the same as an average level of the light that has been output from the optical amplification section in the period in which the ultraviolet light is not output.

4. (Previously Presented) An exposure apparatus as recited in claim 3, wherein the optical modulating section feeds continuous light to the optical amplification section in the period in which the ultraviolet light is not output.

5. (Previously Presented) An exposure apparatus as recited in claim 1, wherein

the optical modulating section includes an auxiliary light source which generates auxiliary light having a wavelength different from that of the laser light generated from the laser light generation section, and

the optical modulating section performs pulse modulation of the laser light from the laser light generation section, and feeds the modulated laser light to the optical amplification sections in the period in which the ultraviolet light is output, and the optical modulating

section feeds the auxiliary light to the optical amplification section in the period in which the ultraviolet light is not output.

6. (Previously Presented) An exposure apparatus as recited in claim 5, wherein

a wavelength zone of the auxiliary light is within a gain range of the optical amplification section and out of a wavelength range in which wavelength conversion is possible by the wavelength conversion section, and

the optical modulating section further includes a wavelength division multiplexing member which combines the auxiliary light and the laser light generated by the laser light generation section, and a modulator which modulates light combined by the wavelength division multiplexing member.

7. (Previously Presented) An exposure apparatus as recited in claim 5, wherein

a wavelength zone of the auxiliary light is within a gain range of the optical amplification section and out of a wavelength range in which wavelength conversion is possible by the wavelength conversion section, and

the optical modulating section further includes a modulator which modulates the laser light generated by the laser light generation section, and a wavelength division multiplexing member which combines the light generated by the modulator and the auxiliary light.

8. (Previously Presented) An exposure apparatus as recited in claim 1, wherein

the optical modulating section includes an auxiliary light source which generates auxiliary light having a polarized state different from that of the laser light generated by the laser light generation section, and

the optical modulating section performs pulse modulation of the laser light from the laser light generation section, and feeds the modulated laser light to the optical amplification sections in the period in which the ultraviolet light is output, and the optical modulating

section feeds the auxiliary light to the optical amplification section in the period in which the ultraviolet light is not output.

9. (Previously Presented) An exposure apparatus as recited in claim 8, wherein

the auxiliary light is not in a polarized state that allows wavelength conversion into ultraviolet light by the wavelength conversion section, and

the optical modulating section further includes a polarized-wave combining member which combines the auxiliary light and the laser light generated by the laser light generation section, and a modulator which modulates light combined by the polarized-wave combining member.

10. (Previously Presented) An exposure apparatus as recited in claim 8, wherein

the auxiliary light is not in a polarized state that allows wavelength conversion into ultraviolet light by the wavelength conversion section, and

the optical modulating section further includes a modulator which modulates the laser light generated by the laser light generation section, and a polarized-wave combining member which combines the light generated by the modulator and the auxiliary light.

11. (Previously Presented) An exposure apparatus which illuminates a first object with ultraviolet light from a laser device and exposes a second object with the ultraviolet light which has passed through the pattern of the first object, wherein

the laser device includes a laser light generation section which generates single wavelength laser light, an optical amplification section including an optical fiber amplifier which amplifies the laser light, and a wavelength conversion section which performs wavelength conversion of the amplified laser light, and

a light feed section is provided which feeds light to the optical amplification section in a condition different from that in a period in which the ultraviolet light is output even in a period in which the ultraviolet light is not output.

12. (Previously Presented) An exposure apparatus as recited in claim 1, further comprising:

an optical splitter section which splits the laser light generated by the laser light generation section into a plurality of laser light beams, wherein

the optical amplification section is independently provided for each of the plurality of the split laser light beams, and

the wavelength conversion section collects fluxes of the laser light beams output from the plurality of optical amplification sections and performs wavelength conversion thereof.

13. (Previously Presented) An exposure apparatus as recited in claim 1, wherein

the laser light generation section generates single wavelength laser light having a wavelength of near 1.5 μm, and

the wavelength conversion section converts a fundamental wave output from the optical amplification section having a wavelength of near 1.5 μm into ultraviolet light of a eighth-order harmonic wave or a tenth-order harmonic wave and outputs the converted light.

14. (Previously Presented) An exposure apparatus as recited in claim 1, whereinthe laser light generation section generates single wavelength laser light having a wavelength of near 1.1 μm, and

the wavelength conversion section converts a fundamental wave output from the optical amplification section having a wavelength of near 1.1 μm into ultraviolet light of a seventh-order harmonic wave and outputs the converted light.

15. (Previously Presented) An exposure apparatus as recited in claim 1, comprising:

an illumination system which irradiates ultraviolet light from the laser device onto a mask as the first object: and

a projection optical system which projects an image of a pattern of the mask onto a substrate as the second object.

16. (Cancelled)

17. (Previously Presented) An exposing method which illuminates a first object with ultraviolet light from a laser device and which exposes a second object with the ultraviolet light which has passed through the pattern of the first object, comprising:

amplifying single wavelength laser light by an optical fiber amplifier, and converting in wavelength the laser light thus amplified into ultraviolet light, and

feeding light to the optical fiber amplifier in a condition different from that in a period in which the ultraviolet light is output even in a period in which the ultraviolet light is not output.

18. (Previously Presented) A method of manufacturing an exposure apparatus which illuminates a pattern of a first object with ultraviolet light from a laser device and which exposes a second object with the ultraviolet light which has passed through the pattern of the first object, comprising configuring the laser device by disposing, with a predetermined positional relationship,

a laser light generation section which generates single wavelength laser light in a wavelength range of from an infrared region to a visible region,

an optical modulating section which modulates the laser light generated by the laser light generation section,

an optical amplification section including an optical fiber amplifier which amplifies the laser light generated by the optical modulation section, and

a wavelength conversion section which performs wavelength conversion of the laser light amplified by the optical amplification section into ultraviolet light by using a nonlinear optical crystal, and

the optical modulating section is configured such that the laser light output from the laser light generation section is pulse-modulated and fed to the optical amplification section

in a period in which the ultraviolet light is output, and light of an amplifiable wavelength zone is fed to the optical amplification section in a range substantially not influencing output of the ultraviolet light even in a period in which the ultraviolet light is not output.

19. (Cancelled)

20. (New) An exposure apparatus as recited in claim 1, further comprising an adjustment apparatus which adjusts oscillation characteristics of the ultraviolet light generated from the wavelength conversion section by at least one of the laser light generation section and the optical modulation section.

21. (New) An exposure apparatus as recited in claim 20, wherein

the oscillation characteristics include at least one of a wavelength, an intensity and an oscillation interval of the ultraviolet light, and the adjustment apparatus detects light having a wavelength different from the wavelength of the ultraviolet light and adjusts the oscillation characteristics.

22. (New) An exposure apparatus as recited in claim 11, wherein

the light feed section makes a peak level of the light fed to the optical amplification section in the period in which the ultraviolet light is not output lower than the laser light fed to the optical amplification section in the period in which the ultraviolet light is output.

23. (New) An exposure apparatus as recited in claim 22, wherein

the light feed section makes an average level of the light output from the optical amplification section in the period in which the ultraviolet light is output substantially the same as an average level of the light output from the optical amplification section in the period in which the ultraviolet light is not output.

24. (New) An exposure apparatus as recited in claim 23, further comprising an adjustment apparatus which adjusts oscillation characteristics of the ultraviolet light generated by the wavelength conversion section by the laser light generation section.

25. (New) An exposure apparatus as recited in claim 24, wherein

the laser light generation section pulse-generates the laser light and the oscillation characteristics include at least one of a wavelength, an intensity and an oscillation interval of the ultraviolet light.

26. (New) An exposure apparatus as recited in claim 11, wherein

the light feed section feeds light having a wavelength different from a wavelength of the laser light fed to the optical amplification section in the period in which the ultraviolet light is output to the optical amplification section in the period in which the ultraviolet light is not output.

27. (New) An exposure apparatus as recited in claim 26, wherein

a wavelength of the light having a wavelength different from a wavelength of the laser light is within a gain range of the optical amplification section and out of a wavelength range in which wavelength conversion is possible by the wavelength conversion section.

28. (New) An exposure apparatus as recited in claim 11, wherein

the light feed section feeds light having a polarized state different from a polarized state of the laser light fed to the optical amplification section in the period in which the ultraviolet light is output to the optical amplification section in the period in which the ultraviolet light is not output.

29. (New) An exposure apparatus as recited in claim 28, wherein

the light having a wavelength different from a wavelength of the laser light is not in a polarized state that allows wavelength conversion into ultraviolet light by the wavelength conversion section.

30. (New) An exposing method as recited in claim 17, wherein

a peak level of the light fed to the optical fiber amplifier in the period in which the ultraviolet light is not output is made lower than the laser light fed to the optical fiber amplifier in the period in which the ultraviolet light is output.

31. (New) An exposing method as recited in claim 30, wherein

an average level of the light output from the optical fiber amplifier in the period in which the ultraviolet light is output is made substantially the same as an average level of the light output from the optical fiber amplifier in the period in which the ultraviolet light is not output.

32. (New) An exposing method as recited in claim 17, wherein

light having a wavelength different from a wavelength of the laser light fed to the optical fiber amplifier in the period in which the ultraviolet light is output is fed to the optical fiber amplifier in the period in which the ultraviolet light is not output.

33. (New) An exposing method as recited in claim 32, wherein

a wavelength of the light having a wavelength different from a wavelength of the laser light is within a gain range of the optical fiber amplifier and out of a wavelength range in which wavelength conversion is possible.

34. (New) An exposing method as recited in claim 17, wherein

light having a polarized state different from a polarized state of the laser light fed to the optical fiber amplifier in the period in which the ultraviolet light is output is fed to the optical fiber amplifier in the period in which the ultraviolet light is not output.

35. (New) An exposing method as recited in claim 34, wherein

the light having a wavelength different from a wavelength of the laser light is not in a polarized state that allows wavelength conversion into ultraviolet light.

36. (New) A device manufacturing method comprising transferring a pattern onto a photosensitive object using an exposing method as recited in claim 17.